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Spring 2-1-2019

M 162.10: Applied Calculus

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Recommended Citation

Fern, Lauren S., "M 162.10: Applied Calculus" (2019). *Syllabi*. 10192.
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Mathematics 162 Section 10
Grading and Policies Spring 2019

Contact Professor:

- ✓ **Lecturer:** Lauren Fern
- ✓ **Office:** Math 205B
- ✓ **Phone:** 243.5398
- ✓ **Email:** fern1@mso.umt.edu
- ✓ **Office Hours:** will be announced in class and posted to the class moodle page.

Catalog Description:

M 162 Applied Calculus 4 cr. Prereq. Appropriate placement score or one of Math 121, 122, 151. Introductory course surveying the principal ideas of differential and integral calculus with emphasis on applications and computer software. Mathematical modeling in discrete and continuous settings. Intended primarily for students who do not plan to take higher calculus.

Learning Outcomes:

Upon completion of this course, a student will be able to (a) Apply calculus as a tool for solving applied problems, such as describing change using calculus techniques; (b) Demonstrate the basic techniques of differentiation and meaning of derivative; (c) Demonstrate the basic techniques of integration and meaning of indefinite and definite integral; (d) Apply basic elementary modeling in terms of differential and/or difference equations; (e) Demonstrate some mathematical software as a tool for applying calculus.

General Education Learning Outcomes:

Upon completion of the mathematical literacy requirement, a student will be able to effectively apply mathematical or statistical reasoning to a variety of applied or theoretical problems.

Text:

D. Hughes-Hallett et al., Applied Calculus, 5th custom edition., John Wiley & Sons, Inc., 2014. A graphing calculator with symbolic capability, such as a TI-89, TI-92 or anything CAS will not be allowed on quizzes or exams.

Grading:

Your course grade will be based on 3 exams, 100 points each. The lowest of the three scores will be dropped; however all three tests must be taken ie **I will NOT drop a zero**. There will be ten quizzes of 10 points each with the lowest two dropped. There are **no** make-up quizzes. All the tests and quizzes are closed book; however a sheet of paper with notes will be permitted. In addition, calculators are also allowed on all tests and quizzes. When a test is returned, there is one week from the date of return for contesting the grading. After that time period the grade will be accepted as final. There will be a 120 point final exam. If taken (see below) it *may not be* dropped. Total maximal number of points (for 2 exams + 8 quizzes + final) is 400. There is no graded homework, however recommended problems are given for each section and are strongly encouraged.

Exceptions to the above rules regarding taking tests, etc. may be made by the course coordinator on an individual basis. Also, extraordinary performance on the final may, at the instructor's discretion, be the basis for raising a grade.

Hard-working students will have an option to avoid taking the final. To qualify for this option and get an **A** grade, one must meet **all** of the following criteria:

1. You must take all three tests during the semester and you must score at least an 85 on each of the three tests.
2. You must take all 10 quizzes given in class during the semester. No make-up quizzes are given.
3. The sum of all the points for all three tests and all ten quizzes (*prior* to anything being dropped) must average to an A grade (90% or higher).

This option does not automatically take effect; you must confirm your eligibility at the end of the semester with me.

<i>Grade</i>	<i>Grading Scale by Percentages</i>
A	90%+
B	89-80%
C	79-65%
D	64-55%
F	Less than 55%
CR	≥ 55%

*** If you are taking this course as a general education requirement, you must take it for a traditional letter grade (not CR/NCR). A grade of "D-" is considered passing and will earn you credit for the course, BUT it will NOT fulfill your general education requirement and you will have to re-take the class***

Important Note: You should not be in this class if you are majoring in Mathematics, Chemistry, Physics, and Computer Science or any other major which requires M 171-172.

Make-ups:

THERE ARE NO MAKE-UPS for the quizzes, regardless of the reason (e.g. sickness, sports, family emergency, etc.); this is why the lowest two are dropped. Exam make-ups will ONLY be given under special and extenuating circumstances, such as a death in the family or illness, provided that a note from the Health Service or doctor is furnished by the student AND permission is given by me **prior** to the exam. At most one make-up exam will be given. **It is your responsibility to notify me as soon as you know you will miss any exam and it must be either prior to or within 24 hours of the exam.**

Add/Drop Policy:

The last day to add/drop or change grading option to Audit by Cyberbear is **1/31**. The last day to change sections and to change grading options is **3/15**. This is also the last day to drop. Changes after this deadline and until **4/26** must be done by Petition to Drop/Add after deadline and approved by me, your advisor and the appropriate Dean. Approval requires genuine extenuating circumstances as listed in the university catalog.

Extenuating circumstances are:

1. Missing a substantial number of classes due to illness, accident or family emergency.
2. A change in work schedule that makes it impossible to attend class or devote adequate time to the course.
3. Registration in the course by error and never attending class.

Reasons that are not satisfactory include:

1. Forgetting to turn in a drop slip.
2. Protecting your grade point average.

Incomplete (I) Grades:

To be eligible for an "I", the following conditions must be met:

1. The student must have been in attendance and passing the course up to 3 weeks before the semester ends; and
2. The student is unable to complete the course due to extenuating circumstances, which usually means serious illness or death in the family.

Incompletes are not given under any other circumstances and are always given at the discretion of the instructor. See the 2018-2019 catalog for further information.

Misconduct:

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the [Student Conduct Code](#). Available for review online at <http://www.umt.edu/SA/VPSA/index.cfm/page/1321>

Disability modifications:

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and [Disability Services for Students](#). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommasson Center 154 or call 406.243.2243. I will work with you and Disability Services to provide an appropriate modification.

Important University-Wide Info and Dates:

- Monday, 21 January: Martin Luther King Day. No school.
- Monday, 18 February: Presidents Day. No school.
- 25-29 March: Spring Break. No school.

Student expectations:

Attendance: Attendance is a required component of the course. You are responsible for obtaining missed assignments and announcements, and being prepared for the next class.

Email: Students are expected to maintain an active email account and to check email daily.

Preparation: Students are expected to come to all classes prepared, with assignments complete, even if they have been absent.

Electronics: Students are expected to keep all phones and other personal electronics away/off during class. Calculators and laptops being used for class work will be acceptable.

Attendance/Participation: Students are expected to attend every class, to be on time for class, and to stay for the entire class period. Students who miss class are expected to complete the day's work and stay on schedule. Attendance is very important in this course. *Sometimes you may think that you don't have time to attend class due to other matters, but past experience has shown that students who miss class actually spend far more than 50 minutes making up what they missed.*

Resources:

Office Hours: My office hours are for you to seek direct help from me. I am available at the times listed on the class moodle page, and other times by appointment. Please come see me with any concerns you have during the semester, especially if there is something going on that is having an impact on your ability to succeed in the class. You can also come see me during these hours for help on math, just as you would get help in the math lab. Don't wait until you are way behind to get help! It is strongly recommended that you communicate with me as much as possible so that we can work together to get you through the course successfully.

The Math Department has tutors available at the Math Learning Center located in the basement of the Math Building Monday – Thursday from 10-4 and Friday from 10-1. There are also evening hours at the UC Commons on Sunday-Thursday. I am also available by appointment to help you out: either in person, by phone or email!

Student: As a student, you may experience a range of challenges that can interfere with learning, such as health: strained relationships, increased anxiety, substance abuse, feeling down, difficulty concentrating, and/or lack of motivation. These mental health concerns or stressful events may diminish your academic performance and/or reduce your ability to participate in daily activities. Counseling is available and treatment does help. The professional staff at Curry Health Center offers free confidential counseling to full-time students. I am always happy to help you find the resources you need.

The following syllabus **is** subject to modifications (and in all probability will be changed due to timing!):

Week	Sections	Quiz and Exam Dates
1/10 – 1/11	Class Intro, 1.1	
1/14 – 1/18	1.2, 1.3, 1.5	Quiz 1
1/21 – 1/25	1.5, 1.6, 1.8	Quiz 2
1/28 – 2/1	1.8, 1.9, 1.10, 2.1	Quiz 3
2/4 – 2/8	2.1, 2.2, 2.3	Quiz 4
2/11 – 2/15	2.4, Test 1, Ch. 2 FOT	Test 1
2/18 – 2/22	3.1, 3.2, 3.3	Quiz 5
2/25 – 3/1	3.3, 3.4, 3.5	Quiz 6

3/4 - 3/8	4.1, 4.2, 4.3	Quiz 7
3/11 - 3/15	4.4, 4.8, Test 2, 6.2	Test 2
3/18 - 3/22	6.2, 6.3, 6.6, 6.7	Quiz 8
3/25 - 3/29	SPRING BREAK!!	
4/1 - 4/5	6.7, 5.1, 5.2, 5.3	Quiz 9
4/8 - 4/12	5.4, 5.5, 5.6	
4/15 - 4/19	Test 3, 9.1, 9.2	Test 3, Quiz 10: Take-home
4/22 - 4/26	9.4, 9.5, Review	
	Final Exam: Monday, 29 April 10:10-12:10	